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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/792,150

03/03/2004

Yossi Oulu

200701128-4

4847

22879

7590

06/11/2009

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

COULTER, KENNETH R

ART UNIT

PAPER NUMBER

2454

NOTIFICATION DATE

DELIVERY MODE

06/11/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM  
ipa.mail@hp.com  
jessica.l.fusek@hp.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/792,150	<b>Applicant(s)</b> OULU ET AL.	
	<b>Examiner</b> Kenneth R. Coulter	<b>Art Unit</b> 2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Specification*

The disclosure is objected to because of the following informalities:

the “Related Applications” section of the specification (p. 1; paragraph 1) has not been updated with U.S. Pat. No. **6,792,460** information;

the U.S. Pat. Application 10/038,098 (p. 4, paragraphs 18; p. 5, paragraph 21; and p. 16, paragraph 56 of the spec.), should include the related patent information;

the U.S. Pat. Application 09/664,264 (p. 7, paragraph 30 of the spec.)

Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 18 are rejected under 35 USC 101 because the claimed invention, in light of the specification (for example on page 4 (paragraph 20)), encompasses non-statutory subject matter since such reads on (encompasses) software or program per se’ (In re Beauregard (CAFC) 35 USPQ2d 1383) and MPEP 2106 (new EXAMINATION GUIDELINES FOR COMPUTER-RELATED INVENTIONS). Even though drafted as “A method”, each of the recited elements encompass their software or program per se’

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equivalent (i.e., a client such as a Netscape Web Browser and/or a server such as Apache are each software devices and yet phrased as a client and a server); thus, the whole of the method encompasses pure software or program per se'; unlike "A method executing on **hardware**". Also, while a hardware device claim, with functional acts, may inherently encompass a corresponding method, the same does not hold in the reverse since a corresponding method is broader in scope and can encompass a scope void of any hardware.

Examiner notes that the **Terminal Disclaimer filed on 3/4/09** was filed with respect to U.S. Pat. No. **6,738,933**.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7, and 8 of U.S. Patent No. **6,792,460**. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following mapping below.

Claim 1 of the present Application map to claims1, 7, and 8 (combined) of '460.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hind et al. (U.S. Pat. Pub. No. 2004/0054695) (Problem Determination Method, System and Program Product) in view of Morshed et al. (U.S. Pat. No. 6,721,941) (Collection of Timing and Coverage Data Through a Debugging Interface).

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1.1 Regarding claim 1, Hind discloses a method of instrumenting Java components installed on an application server in order to enable the Java components to be monitored, the method comprising:

adding a patch to a class loader class of a Java virtual machine installed on the application server, wherein the patch causes the class loader class to pass Java components to an instrumentation component when said Java components are loaded by the Java virtual machine (Figs. 3, 5; Abstract “**inserting** compiled problem determination **probes into program classes**”; paragraphs 36, 38);

receiving, from a patched version of said class loader class, code of a Java component to be loaded by the Java virtual machine (Figs. 3, 5; Abstract; paragraph 38); and

with the instrumentation component, instrumenting said code of the Java component (Figs. 3, 5; Abstract “Once the probes have been inserted, **the classes will be run and trace data will be generated.**”; paragraph 38 “**inserting problem determination probes**”).

However, Hind does not **explicitly** disclose adding functionality for tracking execution times.

Morshed teaches adding functionality for tracking execution times (Abstract "execution information"; col. 8, lines 16 – 28 "run time instrumentation routines ...").

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the tracking of execution times by Morshed in the Hind reference in order to accurately trace data with the inserted probes.

### Paragraph 38 in Hind

The present invention addresses the issues with related art systems by providing a scheme for **inserting problem determination probes** into program classes while the subject system is running. Specifically, under the present invention, the problem determination probes are injected into the runtime of an object-oriented execution environment of a customer's system that interprets and/or incrementally compiles an intermediate virtualized instruction representation of that environment's object logic. One example of such an environment is JAVA where the intermediate virtual instructions resulting from compilation of source instructions are known as "bytecodes," which at run-time are loaded into a Java Virtual Machine (JVM) by a **class loader**. Once loaded, the bytecodes are directly interpreted and/or incrementally compiled by a just-in-time (JIT) compiler into native code for execution. It should be understood, however, that although JAVA terminology will be used in the following description, the teachings described herein could be applied in any environment.

1.2 Per claim 2, Hind teaches the method of claim 1, wherein instrumenting said code comprises adding calls to each of a plurality of methods of the Java component, to thereby provide functionality for monitoring execution times of said methods (Figs. 3, 5; Abstract; paragraphs 10, 38).

1.3 Regarding claim 3, Hind discloses the method of claim 1, wherein instrumenting said code comprises adding functionality for detecting when the Java component is invoked by a colored transaction request message (Figs. 3, 5; paragraph 44 "A typical

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type of probe point is a print statement that will cause some form of trace data to be printed to log database 64.”).

1.4 Per claim 4, Hind teaches the method of claim 1, wherein instrumenting said code comprises adding functionality for reporting transaction identifiers of transactions that invoke the Java component, to thereby allow said execution times to be associated with transactions to which they correspond (Figs. 3, 5; Abstract; paragraph 38).

1.5 Regarding claim 5, Hind does not explicitly disclose generating a breakdown report for the average amount of time that a transaction was processed by servlets. Morshed discloses composing “various statistics for a distributed application.” (Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the statistical computation of Morshed into Hind in order to provide more relevant data with which to judge the system.

1.6 Per claims 6 – 18, the combination of Hind and Morshed disclose the specifics regarding breakdown reports, response times, load times, and interactive reports.

### ***Response to Arguments***



Applicant's arguments with respect to claims 1 – 4 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R. Coulter whose telephone number is 571 272-3879. The examiner can normally be reached on M - F, 7:30 am - 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenneth R Coulter/  
Primary Examiner, Art Unit 2454

/KRC/